

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Mail Stop DD, Commissioner for Patents, Alexandria, VA 22313 on the date shown below:

August 28, 2003

Margaret H. Efron, Patent Attorney



INFORMATION DISCLOSURE  
STATEMENT  
Patent Application  
Docket No. UF-375  
Serial No. 10/602,394

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit : (not yet assigned)  
Applicant(s) : Carrie Haskell-Luevano  
Serial No. : 10/602,394  
Filed : June 23, 2003  
Conf. No. : (not yet assigned)  
For : Novel Melanocortin Receptor Templates, Peptides, and Use Thereof

Mail Stop DD  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §§1.97 AND 1.98

Sir:

In accordance with 37 C.F.R. §1.56, the references listed on the attached form PTO/SB/08 are being brought to the attention of the Examiner for consideration in connection with the examination of the above-identified patent application. Copies of the cited documents are enclosed.

The applicant respectfully asserts that the substantive provisions of 37 C.F.R. §§1.97 and 1.98 are met by the foregoing statement.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Margaret H. Efron".

Margaret H. Efron  
Patent Attorney  
Registration No. 47,545  
Phone No.: 352-375-8100  
Fax No.: 352-372-5800  
Address: 2421 N.W. 41<sup>st</sup> Street, Suite A-1  
Gainesville, FL 32606-6669

MHE/ba

Attachments: Form PTO/SB/08 (3 pages) and references listed thereon (32 refs.).



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				Application Number	10/602,394
				Filing Date	June 23, 2003
				First Named Inventor	Carrie Haskell-Luevano
				Art Unit	(not yet assigned)
				Examiner Name	(not yet assigned)
Sheet	1	of	3	Attorney Docket Number	UF-375

<b>U.S. PATENT DOCUMENTS</b>					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
U1		US- 6,127,381	10-03-2000	Basu et al.	All
U2		US- 6,451,783 B1	09-17-2002	Haddock et al.	All
U3		US-			
U4		US-			
U5		US-			
U6		US-			
U7		US-			
U8		US-			
U9		US-			
U10		US-			
U11		US-			
U12		US-			
U13		US-			
U14		US-			
U15		US-			
U16		US-			
U17		US-			
U18		US-			
U19		US-			
U20		US-			

<b>FOREIGN PATENT DOCUMENTS</b>						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup>	- Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)			
	F1	WO	01/74844 <input checked="" type="checkbox"/> A2	10-11-2001	F. Hoffmann-La Roche Ag	All
	F2	WO	02/18437 <input checked="" type="checkbox"/> A2	03-07-2002	F. Hoffmann-La Roche Ag	All
	F3	WO	03/006620 A2	01-23-2003	Palatin Technologies, Inc.	All
	F4	WO	99/21571 A1	05-06-1999	Trega Biosciences, Inc.	All
	F5	WO	99/54358 A1	10-28-1999	Quadrant Holdings Cambridge Limited	All
	F6					
	F7					
	F8					
	F9					
	F10					

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449B/PTO  
**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

2

of

3

**Complete if Known**

Application Number	10/602,394
Filing Date	June 23, 2003
First Named Inventor	Carrie Haskell-Luevano
Group Art Unit	(not yet assigned)
Examiner Name	(not yet assigned)
Attorney Docket Number	UF-375

**NON PATENT LITERATURE DOCUMENTS**

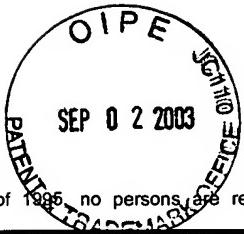
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	R1	BOLIN, K.A. et al. "NMR Structure of a Minimized Human Agouti Related Protein Prepared by Total Chemical Synthesis" <i>FEBS Letters</i> , 1999, pp. 125-131, Vol. 451.	
	R2	CASTRUCCI, A.M.L. et al. " $\alpha$ -Melanotropin: The Minimal Active Sequence in the Lizard Skin Bioassay" <i>General and Comparative Endocrinology</i> , 1989, pp. 157-163, Vol. 73.	
	R3	HRUBY, V.J. et al. " $\alpha$ -Melanotropin: The Minimal Active Sequence in the Frog Skin Bioassay" <i>J. Med. Chem.</i> , 1987, pp. 2126-2130, Vol. 30.	
	R4	HOLDER, J. R. et al. "Structure-Activity Relationships of the Melanocortin Tetrapeptide Ac-His-DPhe-Arg-Trp-NH <sub>2</sub> at the Mouse Melanocortin Receptors. 1. Modifications at the His Position" <i>J. Med. Chem.</i> , 2002, pp. 2801-2810, Vol. 45.	
	R5	HOLDER, J. R. et al. "Structure-Activity Relationships of the Melanocortin Tetrapeptide Ac-His-DPhe-Arg-Trp-NH <sub>2</sub> at the Mouse Melanocortin Receptors: Part 2 Modifications at the Phe Position" <i>J. Med. Chem.</i> , 2002, pp. 3073-3081, Vol. 45.	
	R6	JACKSON, P. J. et al. "Design, Pharmacology, and NMR Structure of a Minimized Cystine Knot with Agouti-Related Protein Activity" <i>Biochemistry</i> , 2002, pp. 7565-7572, Vol. 41. No. 24.	
	R7	KAVARANA, M. J. et al. "Novel Cyclic Templates of $\alpha$ -MSH Give Highly Selective and Potent Antagonists/Agonists for Human Melanocortin-3/4 Receptors" <i>J. Med. Chem.</i> , 2002, pp. 2644-2650, Vol. 45.	
	R8	KIEFER, L. L. et al. "Melanocortin Receptor Binding Determinants in the Agouti Protein" <i>Biochemistry</i> , 1998, pp. 991-997, Vol. 37.	
	R9	KIEFER, L. L. et al. "Mutations in the Carboxyl Terminus of the Agouti Protein Decrease Agouti Inhibition of Ligand Binding to the Melanocortin Receptors" <i>Biochemistry</i> , 1997, pp. 2084-2090, Vol. 36.	
	R10	KIM et al., "Hypothalamic Localization of the Feeding Effect of Agouti-Related Peptide and $\alpha$ -Melanocyte-Stimulating Hormone," <i>Diabetes</i> , February 2000, pp. 177-182, Vol. 49.	
	R11	HASKELL-LUEVANO, C. et al. "Characterization of Melanocortin NDP-MSH Agonist Fragments at the Mouse Central and Peripheral Melanocortin Receptors" <i>J. Med. Chem.</i> , 2001, pp. 2247-2252, Vol. 44.	
	R12	HASKELL-LUEVANO, C. et al. "The Agouti-Related Protein Decapeptide (Yc[CRFFNAFC]Y) Possesses Agonist Activity at the Murine Melanocortin-1 Receptor" <i>Peptides</i> , 2000, pp. 683-689, Vol. 21.	
	R13	HASKELL-LUEVANO, C. et al. "Structure Activity Studies of the Melanocortin-4 Receptor by <i>in Vitro</i> Mutagenesis: Identification of Agouti-Related Protein (AGRP), Melanocortin Agonist and Synthetic Peptide Antagonist Interaction Determinants" <i>Biochemistry</i> , 2001, pp. 6164-6179, Vol. 40.	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  
**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

3

of

3

**Complete if Known**

Application Number	10/602,394
Filing Date	June 23, 2003
First Named Inventor	Carrie Haskell-Luevano
Group Art Unit	(not yet assigned)
Examiner Name	(not yet assigned)

Attorney Docket Number UF-375

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	R14	McNulty, J. C. et al. "High-Resolution NMR Structure of the Chemically-Synthesized Melanocortin Receptor Binding Domain AGRP(87-132) of the Agouti-Related Protein" <i>Biochemistry</i> , 2001, pp. 15520-15527, Vol. 40.	
	R15	AL-OBEIDI, F. et al. "Potent and Prolonged Acting Cyclic Lactam Analogues of $\alpha$ -Melanotropin: Design Based on Molecular Dynamics" <i>J. Med. Chem.</i> 1989, pp. 2555-2561, Vol. 32.	
	R16	OOSTEROM, J. et al. "Common Requirements for Melanocortin-4 Receptor Selectivity of Structurally Unrelated Melanocortin Agonist and Endogenous Antagonist, Agouti Protein" <i>The Journal of Biological Chemistry</i> , January 12, 2001, pp. 931-936, Vol. 276, No. 2.	
	R17	PERRY, W. L. et al. "A Transgenic Mouse Assay for Agouti Protein Activity" <i>Genetics</i> , May 1995, pp. 267-274, Vol. 140.	
	R18	PERRY, W. L. et al. "Coupled Site-Directed Mutagenesis/Transgenesis identifies Important Functional Domains of the Mouse Agouti Protein" <i>Genetics</i> , September 1996, pp. 255-264, Vol. 144.	
	R19	QUILLAN, J. M. et al. "A Synthetic Human Agouti-Related Protein-(83-132)-NH <sub>2</sub> Fragment is a Potent Inhibitor of Melanocortin Receptor Function" <i>FEBS Letters</i> , 1998, pp. 59-62, Vol. 428.	
	R20	SAWYER, T. K. et al. "4- Norleucine, 7-D-Phenylalanine-\$\Alpha\$-\$\Delta\$-Melanocyte-Stimulating Hormone: A Highly Potent \$\Delta\$-Melanotropin with Ultralong Biological Activity" <i>Biochemistry</i> , October 1980, pp. 5754-5758, Vol. 77, No. 10.	
	R21	TOTA, M. R. et al. "Molecular Interaction of Agouti Protein and Agouti-Related Protein with Human Melanocortin Receptors" <i>Biochemistry</i> , 1999, pp. 897-904, Vol. 38.	
	R22	WILLARD, D. H. et al. "Agouti Structure and Function: Characterization of a Potent $\alpha$ -Melanocyte Stimulating Hormone Receptor Antagonist" <i>Biochemistry</i> , 1995, pp. 12341-12346, Vol. 34.	
	R23	YANG, Y-K. et al. "Functional Properties of an Agouti Signaling Protein Variant and Characteristics of its Cognate Radioligand" <i>Am. J. Physiol Regulatory Integrative Comp. Physiol.</i> , 2001, pp. R1877-R1886, Vol. 281.	
	R23	YANG, Y-K. et al. "Molecular Determinants of Ligand Binding to the Human Melanocortin-4 Receptor" <i>Biochemistry</i> , 2000, pp. 14900-14911, Vol. 39.	
	R25	YANG, Y-K. et al. "Characterization of Agouti-Related Protein Binding to Melanocortin Receptors" <i>Molecular Endocrinology</i> , 1999, pp. 148-155.	
	R26		

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.